

After carbon credits, will there be other kinds of credits?

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Carbon credits are necessary, but are they sufficient?

Governments or international organizations set limits on the amount of emissions that a company or country can release. If a company exceeds this limit, it must purchase carbon credits from others who have reduced emissions below the allowed levels.

Carbon credits were initially created to encourage countries and businesses to reduce emissions through a market mechanism. Each credit represents one ton of CO2 or an equivalent greenhouse gas that is not emitted into the atmosphere. This mechanism has created a new financial market where companies can trade the right to emit, generating immediate profit. It is expected to not only provide short-term economic benefits but also incentivize investment in green technology, raising environmental awareness and supporting sustainable initiatives.

However, a deeper analysis reveals significant concerns about the real effectiveness of commodifying nature and the potential for negative consequences. Companies can manipulate the credit system to "greenwash" their image without a genuine commitment to emission reductions. Imagine a corporation that pollutes and severely impacts the environment but has enough financial resources to purchase the necessary carbon credits. In this case, nature becomes a business tool, stripped of its intrinsic value.



Illustration. The idea of commodifying nature raises questions about its actual effectiveness and potential unintended consequences. Photo: AP.

Moreover, as carbon credits become tradable commodities, we not only oversimplify nature's value but also open the door to fraud and unsustainable exploitation. Prof. Vuong Quan Hoang and Dr. Nguyen Minh Hoang, in their book, "Better Economics for the Earth: A Lesson from Quantum and Information Theories" [1], highlight major flaws of the carbon credit trading system: It often disadvantages indigenous communities, with more than 90% of carbon credits from tropical forests failing to provide real climate benefits [2,3].

This raises questions about the fairness of market-based solutions. Should emission reductions be achieved by shifting the burden onto poorer nations and communities? To address this issue, we need more equitable consultation and benefit-sharing mechanisms with local communities.

Should we expect other types of credits?

Many studies and reports have raised concerns about emission reduction projects tied to

deforestation in developing countries (REDD), such as Brazil, the Democratic Republic of Congo, and Indonesia. These projects have been criticized for their lack of transparency and their negative impact on the rights of local communities. REDD+ projects in these countries have faced scrutiny for failing to protect indigenous rights and for their opaque implementation processes, leading to conflict and harm to local populations [4-6].

Given the clear limitations of carbon credits, the possibility of developing new types of credits is becoming increasingly contentious. After carbon credits, we might see the emergence of credits for plastic particles, waste, air pollution, and even biodiversity.

Plastic particle credits could become an important tool to control and reduce plastic waste in the environment by creating a credit exchange system based on minimizing microplastics in industrial and consumer products. Similarly, waste credits could encourage businesses and communities to manage waste more efficiently by trading credits based on the amount of waste recycled or sustainably processed. These credits aim not only to expand environmental protection efforts but also to promote the sustainable use of resources through new financial mechanisms.

However, as seen with carbon credits, they are not without risks: the danger of over-commercialization and the potential for nature protection goals to be overshadowed by short-term financial gain.

In this context, relying solely on financial tools like credits is insufficient. A more comprehensive approach is needed, including changes in policy, law, and the awareness of both businesses and consumers. To truly protect nature, we must go beyond market mechanisms and seek sustainable solutions, not just for short-term economic gain but for the long-term survival of the planet.

The commodification of nature, in the current context, can be seen as a necessary but incomplete step toward achieving a "steady-state economy." This is a state in which economic activity is maintained at a level that allows for survival without causing harm to the larger ecosystem. However, as researchers have warned, rushing to this state could lead to the collapse of existing socio-economic structures, which have been deeply entrenched in a value system based on continuous growth for over 400 years [1].

Even if we reduce or halt production, this approach alone will not solve the problem, as

consumer culture remains unchanged. Therefore, instead of completely abandoning the growth mindset, we need to restructure how we understand "growth."

This is where Vuong and Nguyen's concept of "eco-surplus culture" [1] becomes important. This culture aims not only to minimize negative environmental impacts but also to promote conservation and nature restoration through effective communication and education, alongside active involvement from the scientific community and efforts to restore the bond between humans and nature.

At the same time, we must acknowledge that commodifying nature, when done without transparency and the full participation of local communities, can lead to unforeseen negative consequences, as demonstrated by the REDD+ projects in developing countries. These issues show that in the transition to a steady-state economy, strict oversight mechanisms and a profound shift in societal values are essential to ensure that we not only protect nature but also maintain sustainability and fairness in all economic activities.

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